

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-31 (Canceled).

Claim 32 (Currently Amended): An information medium for recording stream data of MPEG-TS in accordance with a hierarchical data structure, comprising:

a data area configured to store a stream object corresponding to the stream data, the stream object including one or more stream data units, and the one or more stream data units including one or more pairs of a time-stamp and a transport stream packet; and

a management area, located at an area other than said data area, configured to store management information of the stream object, wherein,

said management information, which is configured to control when the stream object is to be displayed or reproduced, includes an area configured to store first copy management information of the stream object,

the at least one stream data unit stores a second data unit including information of the one or more pairs of said time-stamp and said transport stream packet,

said second data unit, stored in at least one of the stream data units, includes a header containing time-related information with respect to the transport stream packet,

the at least one stream data unit stores a second data unit including information of the transport stream packet, and

said second data unit, stored in the at least one stream data unit, includes second copy management information indicating a copyright state of the information of the transport stream packet, and

a copyright information of the stream object is configured to be managed by said first and second copy management information.

Claim 33 (Currently Amended): A method of recording stream data on an information medium including,

a data area configured to store a stream object corresponding to the stream data, the stream object including one or more stream data units, and the one or more stream data units including one or more pairs of a time-stamp and a transport stream packet, and

a management area, located at an area other than said data area, configured to store management information of the stream object, wherein,

said management information, which is configured to control when the stream object is to be displayed or reproduced, includes an area configured to store first copy management information of the stream object,

the at least one stream data unit stores a second data unit including information of the one or more pairs of said time-stamp and said transport stream packet,

said second data unit, stored in at least one of the stream data units, includes a header containing time-related information with respect to the transport stream packet,

the at least one stream data unit stores a second data unit including information of the transport stream packet, and

said second data unit, store in the at least one stream data unit, includes second copy management information indicating a copyright state of the information of the transport stream packet, and

a copyright information of the stream object is configured to be managed by said first and second copy management information,

the method comprising:

recording the stream data in the data area; and

recording the management information in the management area.

Claim 34 (currently amended): A method of reproducing stream data from an information medium including,

a data area storing a stream object corresponding to the stream data, the stream object including one or more stream data units, and the one or more stream data units including one or more pairs of a time-stamp and a transport stream packet, and

a management area being located at an area other than said data area and storing management information of the stream object, wherein,

said management information, which is configured to control when the stream object is to be displayed or reproduced, includes an area configured to store first copy management information of the stream object,

the at least one stream data unit stores a second data unit including information of the one or more pairs of said time-stamp and said transport stream packet,

said second data unit, stored in at least one of the stream data units, includes a header containing time-related information with respect to the transport stream packet,

the at least one stream data unit stores a second data unit including information of the transport stream packet, and

said second data unit, stored in the at least one stream data unit, includes second copy management information indicating a copyright state of the information of the transport stream packet, and

a copyright information of the stream object is configured to be managed by said first and second copy management information,

the method comprising:

reproducing the management information from the management area; and

reproducing the stream data from the data area.

Claim 35 (Currently Amended): An apparatus for recording stream data on an information medium including,

a data area configured to store a stream object corresponding to the stream data, the stream object including one or more stream data units, and the one or more stream data units including one or more pairs of a time-stamp and a transport stream packet, and

a management area, located at an area other than said data area, configured to store management information of the stream object, wherein,

said management information, which is configured to control when the stream object is to be displayed or reproduced, includes an area configured to store first copy management information of the stream object,

the at least one stream data unit stores a second data unit including information of the one or more pairs of said time-stamp and said transport stream packet,

said second data unit, stored in at least one of the stream data units, includes a header containing time-related information with respect to the transport stream packet,

the at least one stream data unit stores a second data unit including information of the transport stream packet, and

said second data unit, stored in the at least one stream data unit includes second copy management information indicating a copyright state of the information of the transport stream packet, and

a copyright information of the stream object is configured to be managed by said first and second copy management information,

the apparatus comprising:

a first recorder block configured to record the stream data in the data area; and

a second recorder block configured to record the management information in the management area.

Claim 36 (Currently Amended): An apparatus for reproducing stream data from an information medium including,

a data area storing a stream object corresponding to the stream data, the stream object including one or more stream data units, and the one or more stream data units including one or more pairs of a time-stamp and a transport stream packet, and

a management area being located at an area other than said data area and storing management information of the stream object, wherein,

said management information, which is configured to control when the stream object is to be displayed or reproduced, includes an area configured to store first copy management information of the stream object,

the at least one stream data unit stores a second data unit including information of the one or more pairs of said time-stamp and said transport stream packet,

said second data unit, stored in at least one of the stream data units, includes a header containing time-related information with respect to the transport stream packet,

the at least one stream data unit stores a second data unit including information of the transport stream packet, and

said second data unit, stored in the at least one stream data unit, includes second copy management information indicating a copyright state of the information of the transport stream packet, and

a copyright information of the stream object is configured to be managed by said first and second copy management information.

the apparatus comprising:

a first reproducer block configured to reproduce the management information from the management area; and

a second reproducer block configured to reproduce the stream data from the data area.

Claims 37-41 (Canceled).

Claim 42 (New): The information medium of claim 32, wherein the header of said second data unit is provided with an area for storing said second copy management information.

Claim 43 (New): The recording method of claim 33, wherein the header of said second data unit is provided with an area for storing said second copy management information.

Claim 44 (New): The reproducing method of claim 34, wherein the header of said second data unit is provided with an area for storing said second copy management information.

Claim 45 (New): The recording apparatus of claim 35, wherein the header of said second data unit is provided with an area for storing said second copy management information.

Claim 46 (New): The reproducing apparatus of claim 36, wherein the header of said second data unit is provided with an area for storing said second copy management information.